

## Use of solar powered unmanned aerial systems with eternal flight for reconnaissance and surveillance purposes

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Year after year Solar Unmanned Aerial Systems (UAS) are getting more common and more interesting. These types of systems are very promising today when fossil fuels are diminishing rapidly. Development studies of unmanned aerial systems which use the energy stored daytime during the night are being conducted by the academic circles. By such an energy management, development of unmanned aerial systems which has eternal flight or very long loiter periods can be possible. An UAS which can fly very long course time can provide many advantages that cannot be obtained by conventional aircrafts and satellites. Such systems can function as fixed satellites on missions requiring continuous intelligence with very low cost. By improving automation systems these vehicles can settle to operation area of itself and they can be grounded easily for case of necessities and maintenance. In this study, it's aimed that surveying use of such a desired system on surveillance and reconnaissance missions.

### Biography

First Lieutenant Zafer KÖK is a jet pilot in Turkish Air Force with over 1000 hours in F-4E and F-4E/2020. He flew in NATO training missions. He completed his Bachelor of Industrial Engineering in 2005 from Turkish Air Force Academy. He is currently an officer at Turkish Air War College and continues his master studies about National and International Safety Strategies Management and Leadership.

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